OPTICAL GRATING BASED MULTIPLEXER DEVICE WITH POWER TAP CAPABILITY

Abstract of the Invention

In an optical grating device, a grating arrangement receives different wavelength output signals from a plurality of radiation sources at input ports thereof, and generates therefrom a multiplexed wavelength output signal at a zero diffraction order output port of the grating arrangement. Additionally, the gating arrangement generates at least one predetermined wavelength output signal at one of a group consisting of a separate predetermined location in an at least one of a symmetric non-zero diffraction order of the grating arrangement, within the grating arrangement itself, and a combination thereof. A separate power tap is coupled to detect the power of a separate one of the at least one predetermined wavelength output signal from the grating arrangement.